

## CLAIMS

1) An antagonist of a mammal prolactin receptor, wherein said antagonist is a variant of mammal prolactin having the following mutations:

- 5 a) a mutation or set of mutations within the 14 N-terminal amino acids, wherein said mutation or set of mutations prevents the formation of the disulfide bridge between Cys<sub>4</sub> and Cys<sub>11</sub>, and  
b) a sterically hindering mutation or set of mutations within  
10 binding site 2 of prolactin.

2) A variant of prolactin according to claim 1, wherein mutation(s) a) comprise the deletion of at least the 4 N-terminal residues of prolactin.

- 3) A variant of prolactin according to claim 2,  
15 wherein mutation(s) a) comprise the deletion of the 9 N-terminal residues of prolactin.

4) A variant of prolactin according to claim 3, having the following mutations:

- a deletion of at least the 9 N-terminal  
20 residues and up to the 14 N-terminal residues;  
and  
- a G129R substitution.

5) A variant of prolactin according to any of claims 1 to 4, which is a variant of human prolactin.

- 25 6) A polynucleotide encoding a variant of prolactin of any one of claims 1 to 5.

7) An expression cassette comprising a polynucleotide of claim 6.

- 8) A recombinant vector comprising a  
30 polynucleotide of claim 6.

9) An host cell transformed by a polynucleotide of claim 6.

10) A transgenic non-human mammal transformed with a polynucleotide of claim 6.

- 35 11) A therapeutic composition comprising or a polynucleotide of claim 6.

12) Use of a variant of prolactin according to any of claims 1 to 5, or of a polynucleotide of claim 6 for obtaining a therapeutic composition for treating or preventing a disease involving PRL- mediated effects.